



416
TECH CENTER 1600
PATENTS
SEP 18 2002
1600/2900

RECEIVED

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Michael Wayne Graham, et al. Examiner: Unassigned
Serial No: 09/646,807 Art Unit: Unassigned
Filed: Dec. 5, 2000 Docket: 11535Z
For: CONTROL OF GENE EXPRESSION Dated: September 12, 2002

Assistant Commissioner for Patents
United States Patent and Trademark Office
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

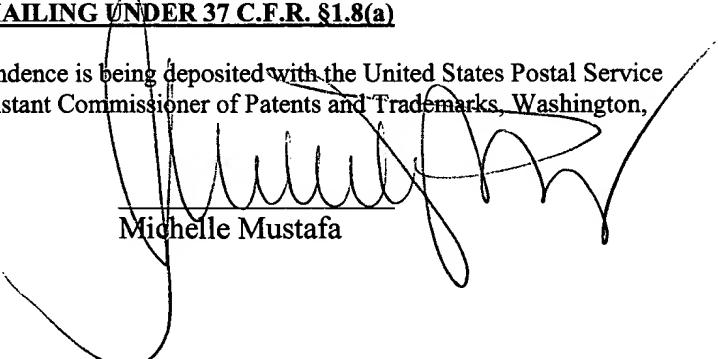
In accordance with 37 C.F.R. §§ 1.97 and 1.98, it is requested that the following references, which are also listed on the attached Form PTO-1449, be made of record in the above-identified case.

1. Fire, A., Xu, S.Q., Montgomery, M.K. Kostas, S.A. Driver, S.E. and Mello, C.C. (1998), "Potent and Specific Genetic Interference by Double-Standard RNA in *Caenorhabditis elegans*". *Nature*, **391** (6669): 806-811;
2. Fire, A., Xu, S.Q., Montgomery, M.K. Kostas, S.A. Timmons, L. Tabara, H. Driver, S.E. and Mello, C.C. (1999), "Genetic Inhibition by Double-Standard RNA". WO 99/32619 (first priority date 23 December, 1997);

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner of Patents and Trademarks, Washington, D.C. 20231 on September 12, 2002.

Dated: September 12, 2002


Michelle Mustafa

3. Garrick, D., Fiering, S., Martin, D.I. and Whitelaw, E. (1998), "Repeat-Induced Gene Silencing in Mammals", *Nature Genetics* **18**(1): 56-59.
4. Dorer, D.R. and Henikoff, S. (1997) Transgene Repeat Arrays Interact with Distant Heterochromatin and Cause Silencing *in cis* and *trans*". *Genetics* **147**(3): 1181-1190.
5. Pal-Bhadra, M., Bhadra U. and Birchler, J.A. (1997) "Cosuppression in Drosophila: Gene Silencing of Alcohol Dehydrogenase by White-Adh Tarnsgenes is Polycomb Dependent". *Cell* **90**(3): 385-387.
6. Bingham, P.M. (1997) "Cosuppression Comes to the Animals". *Cell* **90**(3): 385-387;
(This review article is related to the study described in Pal-Bhadra et al., 1997.)
7. Cameron, F.H. and Jennings, P.A. (1991) "Inhibition of Gene Expression by a Short Sense Fragment". *Nucleic Acids Research* **19**(3): 469-475;
8. Noonberg, S.H. and Hunt, A.C. (1995), "Antisense Oligonucleotide Generators. WO 95/10607.
9. Ohshima, A., Inouye, S. and Inouye M. (1998), "Over expression of Single-Stranded Molecules". U.S. 5,714,323, published February 3, 1998);
10. O'Reilly, D. and Thomas, C.J.R. (1998) "Improvements Relating to the Specificity of Gene Expression", WO 98/44138.
11. Scanlon, K.J. (1996) "Modulation of Drug Radiation Resistant Genes". WO 96/08558.
12. Baumgarten, J., et al. (1993), "Pseudorabies Virus Polynucleotides and their Use in the Production of Virus-Resistant Eucaryotic Cells". EP 0560156, together with its English equivalent, United States Patent No. 5,798,265, dated August 25, 1998, issued to Springer, et al.;
13. Engdahl, H.M., et al. (1997), "A Two Unit Antisense RNA Cassette Test System for Silencing of Target Genes", *Nucleic Acids Research* **25**(16): 3218-3227;
14. Katsuki, M., et al. (1988), "Conversion of Normal Behavior to Shiverer by Myelin Basic Protein Antisense cDNA in Transgenic Mice", *Science* **241**(4865): 593-595;

15. Kook, Y.H., et al. (1994), “The Effect of Antisense Inhibition of Urokinase Receptor in Human Squamous Cell Carcinoma on Malignancy”, The EMBO Journal 13(17): 3983-3991;
16. Lee, R.C., et al. (1993), The *C. elegans* Heterochronic Gene lin-4 Encodes Small RNAs with Antisense Complementarity to lin-14”. Cell 75: 843-854;
17. Moroni, M.C., et al. (1992) EGF-R Antisense RNA Blocks Expression of the Epidermal Growth Factor Receptor and Suppresses the Transforming Phenotype of a Human Carcinoma Cell Line. Journal of Biological Chemistry 267(4): 2714-2722;
18. Nellen, W. and Lichtenstein C. (1993), “What Makes a Messenger RNA Anti-Sensitive?” Trends in Biochemical Sciences 18(11): 419-423;
19. Anderson, W.F. (1998), “Human Gene Therapy”, Nature 392 (suppl.): 25-30;
20. Kappel, C.A., et al. (1992), “Regulating Gene Expression in Transgenic Animals”, Current Opinion in Biotechnology 3(5): 548-553;
21. Touchette, N. (1996), “Gene Therapy – Not Ready for Prime Time (News), Nature Medicine 2(1): 7-8;
22. Verma, I.M., et al. (1997), “Gene Therapy - Promises, Problems and Prospects”, Nature 389 (6648): 239-242;
23. Viville, S. (1997), “Mouse Genetic Manipulation Via Homologous Recombination” In ‘Transgenic animals. Generation and Use’. Houdebine, L.M., ed. Harwood Academic Publishers, France 307-321;
24. Wall, R.J. (1996) “Transgenic Livestock: Progress and Prospects for the Future”, Theriogenology 45(1): 57-68;
25. Chua, N.H., et al. (1997) “Suppression of Plant Gene Expression Using Processing-Defective RNA Constructs”, United States Patent No. 5,686,649;
26. Dougherty, W.G., et al. (1996), “Production of Virus Resistant Plants”, United States Patent No. 5,583,021;
27. Jorgensen, R.A., et al. (1991), “GeneticEngineering of Novel Plant Phenotypes”, United States Patent No. 5,034,323;
28. Jorgensen, R.A., et al. (1993), “Genetic Engineering of Novel Plant Phenotypes”, United States Patent No. 5,231,020;

29. Jorgensen, R.A., et al. (1994) "Genetic Engineering of Novel Plant Phenotypes", United States Patent No. 5,283,184;
30. Baszczynski, C.L., et al. (1998), "Targeted Manipulation of Herbicide-Resistance Genes in Plants", International Application No. WO 99/25853;
31. Baulcombe, D.C., et al. (1987), "Modification of Plant Viruses of their Effects", European Patent No. EP 0242016;
32. Baulcombe, D.C., et al. (1998), "Methods and Means for Gene Silencing Materials and Methods", International Application No. WO 98/36083;
33. Baulcombe, D.C., et al. (1999), "Gene Silencing Materials and Methods", International Application No. WO 99/15682;
34. Bedbrook, J.R., et al. (1997), "Delayed Ripening Tomato Plants", International Application No. WO 97/01952;
35. Bird, C.R., et al. (1993), "Co-ordinated Inhibition of Plant Gene Expression", International Application No. WO 93/23551;
36. Conkling, M.A., et al. (1993), "Nematode-Resistant Transgenic Plants", International Application No. 94/17194;
37. Dougherty, W.G., et al. (1993), "Production of Viral Resistant Plants Via Introduction of Untransferable Plus Sense Viral RNA", International Application No. WO 93/17098;
38. Grierson, D., et al. (1998), "Gene Silencing", International Application No. WO 98/53083;
39. Jorgensen, R.A., et al. (1990), "Genetic Engineering of Novel Plant Phenotypes", European Application No. WO 90/11682;
40. Poulsen, P. (1998), "Antisense Intron Inhibition of Starch Branching Enzyme Expression", European Application No. WO 98/37213;
41. Angell, S.M., et al. (1997), "Consistent Gene Silencing in Transgenic Plants Expressing a Replicating Potato Virus X RNA", The EMBO Journal **16**(12): 3675-3684;
42. Assaad, F.F., et al. (1993), "Epigenetic Repeat-Induced Gene Silencing (RIGS) in Arabidopsis. Plant Molecular Biology **22**(6): 1067-1085;

43. Balandin, T., et al. (1997), "Silencing of a β -1-3-glucanase Transgene is Overcome During Seed Formation", Plant Molecular Biology 34(1): 125-137;
44. Baulcombe, D.C. (1996) RNA as a Target and an Initiator of Post-Transcriptional Gene Silencing in Transgenic Plants". Plant Molecular Biology 32(1-2): 79-88;
45. Cogoni, C., et al. (1994), "Suppression of Gene Expression by Homologous Transgenes", Antonie Van Leeuwenhoek 65(3): 205-209;
46. Cogoni, C., et al. (1996), "Transgene Silencing of the al-1 Gene in Vegetative Cells of Neurospora is Mediated by a Cytoplasmic Effector and Does not Depend on DNA-DNA Interactions or DNA Methylation", The EMBO Journal 15(12): 3153-3163;
47. Cogoni, C., et al. (1997), "Isolations of Quelling-Defective (qde) Mutants Impaired in Posttranscriptional Transgene-Induced Gene Silencing in Neurospora Crassa". Proceeding of the National Academy of Sciences of the United States of America 94(19): 10233-10238;
48. Courtney-Gutterson, et al. (1994), "Modification of Flower Color in Florist's Chrysanthemum: Production of White-flowering Variety Through Molecular Genetics", Biotechnology 12(3): 268-271;
49. de Carvalho, F., et al. (1992), "Suppression of β -1,3-glucanase Transgene Expression in Homozygous Plants", The EMBO Journal 11(7): 2595-2602;
50. de Carvalho Niebel, F. et al. (1995), "Post-transcriptional Cosuppression of β -1,3-glucanase Genes Does Not Effect Acculmulation of Transgene Nuclear mRNA", The Plant Cell 7(3): 347-358;
51. De Lange, P., et al. (1995), "Suppression of Flavonoid Flower Pigmentation Genes in Petunia Hybrida by the Introduction of Antisense and Sense Genes", Current Topics in Microbiology and Immunology 197: 57-75;
52. Depicker, A., et al. (1997), "Post-transcriptional Gene Silencing in Plants", Current Opinion in Cell Biology 9(3): 373-382;
53. English, J.J., et al. (1996), "Suppression of Virus Accumulation in Transgenic Plants Exhibiting Silencing of Nuclear Genes", The Plant Cell 8(2): 179-188;
54. Hamilton, A.J., et al. (1998), "A Transgene with Repeated DNA Causes High Frequency, Post-Transcriptional Suppression of ACC-Oxidase Gene Expression in Tomato", The Plant Journal 15(6): 737-746;

55. Jorgensen, R. (1990), "Altered Gene Expression in Plants Due to Trans Interactions Between Homologous Genes", Trends in Biotechnology **8**(12): 340-344;

56. Jorgensen, R.A., et al. (1996), "Chalcone Synthase Cosuppression Phenotypes in Petunia Flowers: Comparison of Sense vs. Antisense Constructs and Single-Copy vs. Complex T-DNA Sequences", Plant Molecular Biology **31**(5): 957-973;

57. Knoester, M., et al. (1997), "Modulation of Stress-Inducible Ethylene Biosynthesis by Sense and Antisense Gene Expression in Tobacco", Plant Science **126**(2): 173-183;

58. Kunz, C., et al. (1996), "Developmentally Regulated Silencing and Reactivation of Tobacco Chitinase Transgene Expression", The Plant Journal **10**(3): 437-450;

59. Lee, K.Y., et al., (1997), "Post-transcriptional Gene Silencing of ACC Synthase in Tomato Results from Cytoplasmic RNA Degradation", The Plant Journal **12**(5): 1127-1137;

60. Lindbo, J.A., et al., (1993), "Induction of a Highly Specific Antiviral State in transgenic Plants – Implications for Regulation of Gene Expression and Virus Resistance", The Plant Cell **5**(12): 1749-1759;

61. Matzke, M.A., et al. (1998), "Epigenetic Silencing of Plant Transgenes as a Consequence of Diverse Cellular Defence Responses", Cellular and Molecular Life Sciences **54**(1): 94-103;

62. Mueller, E., et al. (1995), "Homology-dependent Resistance – Transgenic Virus Resistance in Plants Related to Homology-Dependent Gene Silencing", The Plant Journal **7**(6): 1001-1013;

63. Meyer, P. (1996), "Repeat-induced Gene Silencing –Common Mechanisms in Plants and Fungi", Biological Chemistry Hoppe-Seyler **377**(2): 87-95;

64. Napoli, C., et al. (1990), "Introduction of a Chimeric Chalcone Synthase Gene into Petunia Results in Reversible So-Suppression of Homologous Genes in trans", The Plant Cell **2**(4): 279-289;

65. Palauqui, J.C., et al. (1997), "Systemic Acquired Silencing: Transgene-specific Post-transcriptional Silencing is Transmitted by Grafting from Silenced Stocks to Non-silenced scions", The EMBO Journal **16**: 4738-4745;

66. Pang, S.Z., et al. (1997), "Nontarget DNA Sequences Reduce the Transgene Length Necessary for RNA-mediated Tospovirus Resistance in Transgenic

Plants", Proceedings of the National Academy of Sciences of the United States of America **94**(15): 8261-8266;

67. Park, Y.D., et al. (1996), "Gene Silencing Mediated by Promotor Homology Occurs at the Level of Transcription and Results in Meiotically Heritable Alterations in Methylation and Gene Activity", The Plant Journal **9**(2): 183-194;
68. Que, Q., et al. (1998), "Homology-based Control of Gene Expression Patterns in Transgenic Petunia Flowers", Developmental Genetics **22**(1): 100-109;
69. Romano, N., et al. (1992), "Quelling: Transient Inactivation of Gene Expression in *Neurospora Crassa* by Transformation with Homologous Sequences", Molecular Microbiology **6**(22): 3343-3353;
70. Sadiq, M., et al. (1994), "Developmental Regulation of Antisense-mediated Gene Silencing in *Dictyostelium*", Antisense Research & Development **4**(4): 263-267;
71. Sijen, T., et al. (1996), "RNA-mediated Virus Resistance – Role of Repeated Transgenes and Delineation of Targeted Regions", The Plant Cell **8**(12): 2277-2294;
72. Singer, M.J., et al. (1995), "Genetic and Epigenetic Inactivation of Repetitive Sequences in *Neurospora Crassa*: RIP, DNA Methylation, and Quelling", Current Topics in Microbiology and Immunology **197**: 165-177;
73. Smyth, D.R. (1997), "Gene Silencing: Cosuppression at a Distance", Current Biology **7**(12): R793-795;
74. Stam, M., et al. (1997), "The Silence of Genes in Transgenic Plants", Annals of Botany **79**(1): 3-12;
75. Tanzer, M.M., et al. (1997), "Characterization of Post-Transcriptionally Suppressed Transgene Expression that Confers Resistance to Tobacco Etch Virus Infection in Tobacco", The Plant Cell **9**(8): 1411-1423;
76. Van der Krol, et al. (1990), "Inhibition of Flower Pigmentation by Antisense CHS Genes: Promoter and Minimal Sequence Requirements for the Antisense Effect", Plant Molecular Biology **14**(4): 457-466;
77. Van der Krol, et al. (1990), "Flavonoid Genes in Petunia: Addition of a Limited Number of Gene Copies May Lead to a Suppression of Gene Expression", The Plant Cell **2**(4): 291-299;

78. Vacheret, H. Nussaume, et al. (1997), "A Transcriptionally Active State is Required for Post-Transcriptional Silencing (Cosuppression) of Nitrate Reductase Host Genes and Transgenes", The Plant Cell 9(8): 1495-1504;
79. Lisziewicz et al. (1993) "Inhibition of human immunodeficiency virus type 1 replication by regulated expression of a polymeric Tat activation response RNA decoy as a strategy for gene therapy in AIDS". Proceedings of the National Academy of Sciences of the United States of America 90: 8000-8004;
80. Sun et al. (1995) "Resistance to human immunodeficiency virus type 1 infection conferred by transduction of human peripheral blood lymphocytes with ribozyme, antisense, or polymeric transactivation response element constructs". Proceedings of the National Academy of Sciences of the United States of America 92: 7272-7276;
81. Gervais et al. (1997) "Multigene antiviral vectors inhibit diverse human immunodeficiency virus type 1 clades". Journal of Virology 71(4): 3048-3053;
82. Bevec et al. (1994) "Constitutive expression of chimeric *Neo*-Rev response element transcripts suppresses HIV-1 replication in human CD4⁺ T lymphocytes". Human Gene Therapy 5: 193-201;
83. Sullenberger et al. (1990) "Overexpression of TAR sequences rendered cells resistant to human immunodeficiency virus replication". Cell 63: 601-608;
84. Dorer et al. (1994) "Expansion of transgene repeats cause heterochromatin formation and gene silencing in Drosophila". Cell 77: 993-1002;
85. Lee et al. (1994) "Inhibition of human immunodeficiency virus type 1 in human T cells by a potent Rev response element decoy consisting of 13-nucleotide minimal Rev-binding domain". Journal of Virology 68(12): 8254-8264;
86. Chuah et al. (1994) "Inhibition of human immunodeficiency virus Type-1 by retroviral vectors expressing antisense-TAR". Human Gene Therapy 5: 1467-1475;
87. Sullenberger et al. (1991) "Analysis of trans-acting response decoy RNA-mediated inhibition of human immunodeficiency virus type 1 transactivation". Journal of Virology 65(12): 6811-6816;
88. Napoli, Carolyn et al., "Introduction of a Chimeric Chalcone Synthase Gene into Petunia Results in Reversible Co-Suppression of Homologous Genes in trans", The Plant Cell, 2: 279-289 (1990);

89. Lindbo, John et al., "Induction of a Highly Specific Antiviral State in Transgenic Plants: Implications for Regulation of Gene Expression and Virus Resistance", The Plant Cell, 5: 1749-1759 (1993);
90. Park, Y. et al., "Gene silencing mediated by promoter homology occurs at the level of transcription and results in meiotically heritable alterations in methylation and gene activity", The Plant Journal, 9: 183-194 (1996);
91. Waterhouse, Peter et al., "Virus resistance and gene silencing in plants can be induced by simultaneous expression of sense and antisense RNA", Plant Biology, 95: 13959-13964 (1998);
92. Smith, Neil et al., "Total Silencing by intronspliced hairpin RNAs", Nature, 407: 319-320 (2000);
93. Katsuki, Motoya et al., "Conversion of Normal Behavior to Shiverer by Myelin Basic Protein Antisense cDNA in Transgenic Mice", Science, 241: 593-595 (1988);
94. Moroni, Maria Cristina et al., "EGF-R Antisense RNA Blocks Expression of the Epidermal Growth Factor Receptor and Suppresses the Transforming Phenotype of a Human Carcinoma Cell Line", The Journal of Biological Chemistry, 267(5): 2714-2722 (1992);
95. Kook, Yoon Hoh et al., "The effect of antisense inhibition of urokinase receptor in human squamous cell carcinoma on malignancy", The EMBO Journal, 13(17): 3983-3991 (1994);
96. Palauqui, Jean-Christophe et al., "Systemic acquired silencing: transgene-specific post-transcriptional silencing is transmitted by grafting from silenced stocks to non-silenced scions", The EMBO Journal, 16(15): 4738-4745 (1997);
97. Palauqui, Jean-Christophe et al., "Transgenes are dispensable for the RNA degradation step of cosuppression", Plant Biology, 95: 9675-9680 (1998);
98. Voinnet, Olivier et al., "Systemic Spread of Sequence-Specific Transgene RNA Degradation in Plants Is Initiated by Localized Introduction of Ectopic Promoterless DNA", Cell, 95: 177-187 (1998);
99. Fire, Andrew et al., "Potent and specific genetic interference by double-stranded RNA in *Caenorhabditis elegans*", Nature, 391: 806-811 (1998);

100. Wianny, Florence et al., "Specific interference with gene function by double-stranded RNA in early mouse development", Nature Cell Biology, 2: 70-75 (2000);
101. Tuschl, Thomas et al., "Targeted mRNA degradation by double-stranded RNA in vitro", Genes & Development, 13: 3191-3197 (1999);
102. Hamilton, Andrew J. et al., "A Species of Small Antisense RNA in Posttranscriptional Gene Silencing in Plants", Science, 286: 950-952 (1999);
103. Zamore, Phillip et al., "RNAi: Double-Stranded RNA Directs the ATP-Dependent Cleavage of mRNA at 21 to 23 Nucleotide Intervals", Cell, Vol. 101: 25-33 (2000);
104. Hammond, Scott M. et al., "An RNA-directed nuclease mediates post-transcriptional gene silencing in *Drosophila* cells", Nature, 404: 293-296 (2000);
105. Caplen, Natasha J. et al., "dsRNA-mediated gene silencing in cultured *Drosophila* cells: a tissue culture model for the analysis of RNA interference", Gene, 252: 95-105 (2000);
106. Cogoni, Carlo et al., "Gene silencing in *Neurospora crassa* requires a protein homologous to RNA-dependent RNA polymerase", Nature, 399: 166-169 (1999);
107. Cogoni, Carlo et al., "Posttranscriptional Gene Silencing in *Neurospora* by a RecQ DNA Helicase", Science, 286: 2342-2344 (1999);
108. Dalmay, Tamas et al., "An RNA-Dependent RNA Polymerase Gene in *Arabidopsis* Is Required for Posttranscriptional Gene Silencing Mediated by a Transgene but Not by a Virus", Cell, 101: 543-553 (2000);
109. Brigneti, Gianinna et al., "Viral pathogenicity determinants are suppressors of transgene silencing in *Nicotiana benthamiana*", The EMBO Journal, 17(22): 6739-6746 (1998);
110. Tabara, Hiroaki et al., "The rde-1 Gene, RNA Interference, and Transposon Silencing in *C. elegans*", Cell, 99: 123-132 (1999);
111. Domeier, Mary Ellen et al., "A Link Between RNA Interference and Nonsense-Mediated Decay in *Caenorhabditis elegans*", Science, 289: 1928-1930 (2000);

112. Smardon, Anne et al., "EGO-1 is related to RNA-directed RNA polymerase and functions in germ-line development and RNA interference in *C. elegans*", Current Biology, 10(4): 169-178 (2000);
113. Wassenegger, Michael et al., "Signalling in gene silencing", Elsevier Science, 4(6): 207-209 (1999);
114. Ding, Shou Wei, "RNA silencing", Current Opinion in Biotechnology, 11: 152-156 (2000);
115. Marx, Jean, "Interfering With Gene Expression", Science, 288: 1370-1372 (2000); and
116. Gura, Trisha, "A silence that speaks volumes", Nature, 404: 804-808 (2000).

Copies of the above-cited references were previously submitted in the parent application, Serial No. 09/100,812, in Information Disclosure Statements dated December 20, 2000; June 20, 2002; and September 3, 2002.

Consideration of this Information Disclosure Statement is respectfully requested, since the art may be material to the examination of the present application as defined under 37 C.F.R. §1.56.

Inasmuch as this Information Disclosure Statement is being submitted in accordance with the schedule set out in C.F.R. §1.97(b), no statement or fee is required.

Respectfully submitted,



Frank S. DiGiglio
Registration No. 31,346

Scully, Scott, Murphy & Presser
400 Garden City Plaza
Garden City, New York 11530
(516) 742-4343
FSD:ahs

O I P E

1636

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

SEP 18 2002 Under 37 CFR 1.97(b) or 1.97(c))

Docket No.

11535Z

In Re Application Of Michael Wayne Graham, et al.

#16368
9/20/02Serial No.
09/646,807Filing Date
Dec. 5, 2000Examiner
UnassignedGroup Art Unit
Unassigned

Title: CONTROL OF GENE EXPRESSION

TECH CENTER 1600/12900
RECEIVED
SEP 18 2002
9/20/02

Address to:

Assistant Commissioner for Patents
Washington, D.C. 20231

37 CFR 1.97(b)

1. The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application; within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or before the mailing date of a first Office Action on the merits, whichever event occurs last.

37 CFR 1.97(c)

2. The Information Disclosure Statement submitted herewith is being filed after three months of the filing of a national application, or the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or after the mailing date of a first Office Action on the merits, whichever occurred last but before the mailing date of either:

1. a Final Action under 37 CFR 1.113, or
2. a Notice of Allowance under 37 CFR 1.311,

whichever occurs first.

Also submitted herewith is:

a certification as specified in 37 CFR 1.97(e);

OR

the fee set forth in 37 CFR 1.17(p) for submission of an Information Disclosure Statement under 37 CFR 1.97(c).

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.

11535Z

In Re Application Of: Michael Wayne Graham, et al.

RECEIVED
SEP 16 2002
PATENT & TRADEMARK OFFICE

Serial No. 09/646,807

Filing Date
Dec. 5, 2000Examiner
UnassignedGroup Art Unit
Unassigned

Title: CONTROL OF GENE EXPRESSION

RECEIVED
SEP 18 2002
TECH CENTER 1600/2900

Payment of Fee

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

A check in the amount of _____ is attached.

The Assistant Commissioner is hereby authorized to charge and credit Deposit Account No. 19-1013/SSMP as described below. A duplicate copy of this sheet is enclosed.

Charge the amount of _____

Credit any overpayment.

Charge any additional fee required.

Certificate of Transmission by Facsimile*

I certify that this document and authorization to charge deposit account is being facsimile transmitted to the United States Patent and Trademark Office (Fax. No. _____) on _____
(Date)

Signature

Typed or Printed Name of Person Signing Certificate

Certificate of Mailing by First Class Mail

I certify that this document and fee is being deposited on September 12, 2002 with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Signature of Person Mailing Correspondence

Michelle Mustafa

Typed or Printed Name of Person Mailing Correspondence

*This certificate may only be used if paying by deposit account.


Signature

Dated: September 12, 2002

Frank S. DiGilio
Registration No. 31,346
SCULLY, SCOTT, MURPHY & PRESSER
400 Garden City Plaza
Garden City, New York 11530
(516) 742-4343

FSD:ahs

CC: